RUG WEAVING AS A BUSINESS.

By

Dorothy R. Carmer .



HV 17/



Reprinted from Occupational Therapy and Rehabilitation Vol. XI, No. 4, August, 1932 Copy one

C. /

RUG WEAVING AS A BUSINESS

DOROTHY R. CARMER

New York State Commission for the Blind

Each day, each week and each month the question comes to our minds, is made audible and finally develops into a discussion among the "Board Members" as to what is a practical activity to add to our work shop, or how can we bring our existing activities up to the point of standardization whereby we can compete on the open market either wholesale or retail.

Business is not altruistic but should be a mutual benefit to both parties. Therefore, we start with the premise that we will not make a sentimental appeal on the basis that we are working with a handicapped group, but rather that we start with limitations which do not enter into the calculations of the normal manufacturer.

Our first, last and always present consideration is the blind man or woman and I think it is quite universally recognized that the average person without sight is only from 50 to 70 per cent as efficient as that particular person would be with what "Rene Roy" says "is that precious faculty." Given then a production power, of let us assume 60 per cent of normal, we must next turn to the problem as to how this can be adjusted to enable us to pay wages up to 80 per cent of normal, keeping always in mind the fact that our product is to be put on a competitive market and priced to meet slight fluctuations without an appeal to charity to cover loss or by playing the "baby act" with our would be purchaser.

One asset in our favor is that the administrative expense, which in many associations for the handicapped is written off the ledger on the debit side and is covered by membership dues or interest on an endowment. The administrative expense charged against our industrial shop is only a percentage of the full administration expense for the Association whose work covers social and recreational service, educational propaganda, and many other calls on the time of the executive and office staffs.

In addition to the deficit in wages covered, let us say in this way, we have in many industrial shops for the handicapped a loss caused:

First, through lack of capital to buy in quantities when and where prices are at the best, and to pay in time to secure all discounts.

Second, through waste in handling raw material or mistakes in finished articles.

Third, tie-up in finished articles depreciating through market demands such as style, etc., and through damage in retail selling.

Let us, therefore, determine this loss by a careful check up each month, and decide in percentages how this would compare with the normal manufacturer's profit.

Assuming then that we have a 20 per cent loss on wages, covered by eliminating administration expenses normally charged against manufacturing cost, and that profits will be used to offset unavoidable losses, we can now hope to handle our industries in a reasonably businesslike manner, which to the self respecting man or woman handicapped, physically only, makes for a healthy normal atmosphere in the workshop.

Now for the choice of that industry which might be rugs and a demonstrating analysis for the reason of our choice. Let us suppose we are new at the game. Where will we go for our first information?

- A. We know rugs can be woven by blind men and women.
- B. We know rugs are a necessity, therefore, A + B must be made to = X, the market or unknown quantity.

Our first move, is to enlist the services of an efficiency engineer in consultation. His advice will be worth serious consideration, for although he is not infallible, he is at least a specialist. He may suggest calling a meeting of a group of the buyers from the large stores in our vicinity to ask them to tell us the type of rug in which they would be interested (provided there is no depression), the regulation sizes and weight of these rugs and the com-

petitive wholesale price per square foot, etc., and to give us any other constructive advice that might be of assistance. Undoubtedly, they will tell us to sell under a trade name, letting the standard of our production sell itself in the open market, doing away with the old-fashioned sentimental appeal of "Made by the Blind," which buyers say does more harm than good on the wholesale market.

First: Because it is an out-worn method of selling.

Second: Because the sentimental appeal annoys the practical buyer and makes him turn to his "charity funds." And

Third: The retail purchaser instinctively looks for a "flaw" which "she" seeing the word "Blind" feels must be there.

And last, but not least, the buyer will try to escape the representative salesmen knowing his shelves already hold goods he was forced to take through sympathy several months ago. Keeping the name of the local association before the public is a very negative and lame excuse for this unprofessional method of selling.

Next, the buyers will tell us that sizes must be regulation, such as 18- by 36-inch, 24- by 36-inch, 27- by 54-inch, 30- by 60-inch, 36- by 72-inch, etc., and that these sizes must not vary. A purchaser wants a certain size to fit a given space and is annoyed if she finds on putting the rug down in her home that it is an inch or two too long or too short. A standard weight per square foot is also important. This in a rag rug usually runs between 8 and 12 ounces, and is determined by the type of material as well as by the twisting and weaving. All must come up to specifications and each rug must be weighed when finished.

So far our theoretical information can be summed up in a few words: Learn to know our local buyers and make them our friends, not through constant annoyance in trying to make them listen to our plaintive appeal, but by establishing the fact that we are a local manufacturer and have goods which he will need and which will be sold on their merit at the competitive price. We will not undersell to unload, or overprice because our methods of manufacture are antiquated. Let us keep up with trade journals and be familiar with all fluctuations.

The normal manufacturer decides on his commodity first and then employs the type of hand best fitted to that particular industry. We on the other hand have a group of blind men and women whom we want employed with the kind of work that will give them a living wage with little or no subsidy, by a process which will interest them because they can do it well, and at the end a production which the buying public wants. Should this production be rugs which must be tightly woven to give service, we need fairly heavy looms and in consequence it becomes an industry for men, and men only who, working from seven to eight hours a day, will be benefited with the regular rhythmic exercise.

With our weavers chosen, we must procure good equipment which will be housed, we hope, in a large, well ventilated and well lighted room. There are any number of strong rug looms on the market selling from fifty to one hundred dollars, or special ones may be built. These should be fastened firmly to the floor and the bench and treadles, (if the weaver is not standing) adjusted to the individual weaver who will work on each loom. It is always well to have two or three extra looms treaded to avoid delay if the weavers are on piece work, but this, of course, is the responsibility of the supervisor or foreman of the shop.

Each loom should carry a permanent warper doing away with time and energy, which is money, wasted in putting on warp. These frames should be strongly built with iron or heavy wood uprights and cross bars in which are fastened at right angles wooden or iron dowels $\frac{1}{2}$ -inch in diameter, varying in length as to the number of $\frac{1}{2}$ pound spools of warp each is to hold, which will vary from one to three. These warpers are usually built by a local carpenter and cost from seventy-five or eighty dollars a piece. They can be made double to carry warp for two looms.

A good rag rug is made of tightly twisted material. This twisting is done by means of a twisting machine and a runway of from 25 to 50 feet. The machine consists of an upright to which a large circle is attached. On this circle are hooks which are turned by means of a handle. The upright is fastened to a small platform on wheels which moves as the strips of material, tied or looped to the hooks on the circle and secured also to hooks on the

board at the end of the runway, wind on each other and shorten. This process should be done by a person with some vision as it is important to combine proper colors and be able to cut out unattractive pieces which sometimes are found in hit and miss material when purchased in large quantities. These twisting machines may be purchased for \$50.00.

Now with large tables for inspecting, scales for weighing, up right frames for tying the fringes, and shuttles, beaded tape measures and rounded shears (milliner's shears) our equipment is at the moment complete. The initial out lay for a shop to provide work for five blind weavers, one twister, one woman to tie fringes and one shuttle winder amounts to \$850.00.

The instructor or supervisor of this shop should be a man or woman of good health and happy outlook on life, who not only understands weaving and looms thoroughly, but has patience and tact, and is firmly insistent on keeping a high standard of workmanship. The salary of such a person might run the gamut from \$15.00 to \$50.00 a week depending upon the qualifications and experience of said person and on the demands of the shop. In addition to instructing, the supervisor must see that all equipment is kept in order, and all material inventoried—finished rugs inspected and marked and checked for sales department. The most intelligent of modern teachers insist upon rhythm, often using a melody as a means of interpreting it. In this way eliminating all unnecessary motions and throwing the weaver into a rhythm which he continues to use subconsciously.

Let us consider this personnel in regard to age groups, etc., and estimate through the experience of others what training they will need in order to manufacture these rugs that are to be sold on their merit.

It should take about four weeks for an intelligent blind man to become a good weaver and then it is only a question of practice to perfect the speed. An average weaver on a good well balanced loom with his shuttles automatically wound, should be able to turn out from 2 to 5 rugs per day. These rugs might average $52\frac{1}{2}$ square feet and piece work at 0.05 per square feet would net \$2.60 wages per day, or \$14.00 per week. This average is based

on a five-day week and has been worked out by four different shops.

The actual cost of material depends on the kind and where purchased and in what amount. Good 90 per cent silk rags, color guaranteed, cut and sewed may be purchased F. O. B. New York in thousand pound lots from 15 to 17 cents per pound.

Half pound discs of warp run from 500 to 600 yards in length can be purchased from 35 to 45 cents per pound. A loom threaded with 10 dent reed for 24-inch rugs would need 130 pounds of warp for initial set up of the permanent warper, but each warp thread would be from 5 to 6 hundred yards in length.

Following are charts showing the method by which prices were computed. This will vary depending on cost of material, wages paid, etc. The usual retail mark-up on rag rugs over the wholesale price is 80 per cent.

Cost Analysis on Hit and Miss Twisted Rugs

COST ANALYSIS ON HIT AND MISS I WISTED RUGS
24- by 36-inch rugs
Warp-5 oz
Rags—2 lbs. 5 oz. (10 per cent waste on materials)
Weaving—6 sq. ft
Twisting—2 lbs. 5 oz
Winding—2 lb. 5 oz
Tying—48 inches
Total cost
Weight per sq. ft.—7 oz.
Price per sq. ft.
Warp cost
Rags cost
Weaving 5 cents per square foot
Twisting 1 cent per pound
Winding 2 cents per pound
Tying 6 cents per yard
Cost and Production per Day
24- by 36-inch rugs
3 weavers make 7 rugs each day—21 rugs
21 rugs @ 2 lbs. 10 oz. cach weigh 55 lbs. 2 oz

\$2.10

7.28

0.94

\$10.32

48 lbs. 9 oz. rags @ 0.15.....

10 per cent add for waste on 9.38.....

Total cost of material.....

21 rugs @ 6 sq. ft. each—126 sq. ft	\$10.32	
126 sq. ft. @ 0.05 for labor	6.30	
Tying fringe @ 0.08 on 21 rugs	1.68	
Winding bobbins—48 lbs. 9 oz. @ 0.02 lb	0.97	
Twisting rag—48 lbs. 9 oz. @ 0.01 lb	0.49	
Total cost		\$19.76
21 rugs total cost\$19.76		
1 rug costs 0.95		
24- by 36-inch rug—6 sq. ft.		
6 sq. ft.—0.95		
1 sq. ft.—0.16 sq. ft.		

Chart to be used for inspection

For Shop	Supervisor				
Date	Number	Worker	Watcher	Grade	Remarks

Each rug being now finished is marked with a folded pin tag 2 by 3 inches in size. The front side of this tag carries a trade name, size and price. The reverse side is marked with a capital letter representing the shop where the rug was made, number representing weaver and initials representing inspector. In this way a check back can be made if for any reason it is necessary, even after the rug is on the market. All rugs sold wholesale must come up to specifications and standard. Rugs which do not meet these standards either through incorrect size or flaw in weaving become "seconds" which in turn fall into two classes. Those below specifications in size or weight, but well woven, may be sold on a good retail market at a slight mark upward—say 10 per cent. Others poor in workmanship or damaged in any other way should be charged to "loss."

This sums up our analysis for a basis on which to start a new project in rugs. It has been worked out from a six months experiment in four association work shops with the average blind men between the ages of twenty and forty, who were able to make an average wage of \$13.50 per week.

Note: The prices given in this paper are of the summer of 1931. Present conditions would necessitate revision.



Carmer Dorothy R. RUG WEAVING AS A BUSINESS.

Date Due					

